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Bison Pilot Program

One of the signature species of the American West, the wild bison, is calling the Rocky Mountain Arsenal National Wildlife Refuge home starting this spring. Approximately 15 animals will be brought to the site as part of an ongoing effort to better conserve and protect wild bison within the National Wildlife Refuge System.

The bison arriving at the Refuge are the genetic “gold medal standard,” meaning they have no detectable cattle genes in their ancestry. The Service is undertaking a series of bison transfers among and between national wildlife refuges in Colorado, Montana, North Dakota, Nebraska and Iowa to ensure this key genetic strain will survive even if there is a drought or catastrophic event at one of the refuges.



Photo: U.S. Army

This small herd will serve as a pilot program for reintroducing bison to the Refuge. The pilot herd is located on approximately 1,400 acres of Refuge land in the northwest portion of the site. A high tensile woven wire fence

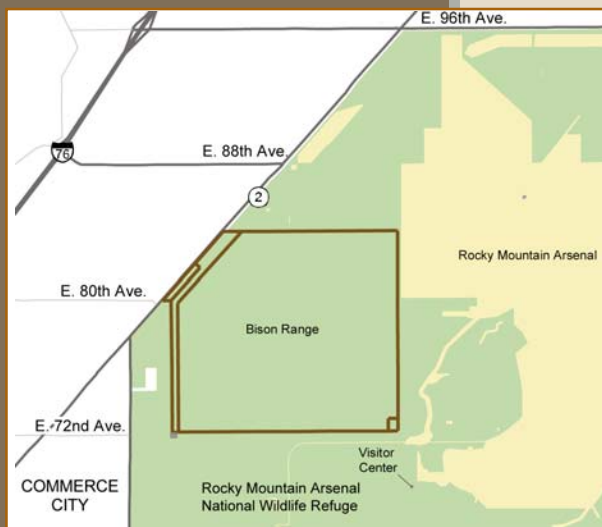
was constructed around the bison's habitat to ensure the animals remain on Refuge property. The Service has been managing bison for more than 100 years and is confident this type of fence, which has been used at other refuges around the country, will be successful in containing the bison herd.

The Service continues to coordinate with its Army and Shell partners at the Arsenal, and with regulatory agencies, local governments and other entities involved with the site, to ensure the bison reintroduction fully complies with all applicable laws, regulations and policies related to the ongoing clean-up at the Arsenal and the transformation of the site to a national wildlife refuge.

“Bison were once a key species on the landscape here,” said Steve Berendzen, the new refuge manager at the Rocky Mountain Arsenal National Wildlife Refuge. “This pilot project gives us an excellent opportunity to determine, in a controlled manner, the ecological response of habitat and wildlife at the Arsenal to bison.”

Bison were historically an integral component of the North American prairie ecosystem. Migrating bison provided essential functions, such as grazing and other disturbances that, together with fire, drove key ecological processes on the prairie. The decimation of the historic bison herds across the continent in the late 19th century removed

this component from the prairie ecosystem. As the Service works to restore and conserve prairie habitats throughout the National Wildlife Refuge System, the agency has identified wild bison as a species that can and will play a vital role in this effort. ■



Prescribed Burns Provide Healthy Native Grasses

This spring you may see smoke coming from the Arsenal/Refuge, as the U.S. Fish and Wildlife Service conducts its prescribed burn program. Burning the vegetation improves wildlife habitat, controls weeds and reduces the amount of leaves, dead grass, branches and dead trees to help lessen the risk of wildfires. Fire returns minerals and nutrients directly to the soil, making them immediately available to plants, and kills weed seeds and annual weeds. After a burn, native plants come back much more robust and healthy.

The Service carefully develops a burn plan with specific goals for each area. Burn plans “prescribe” the appropriate temperature, weather, and necessary fire techniques to properly renovate an area. The prescribed burns are closely coordinated with the State of Colorado and entities surrounding the site, such as Denver International Airport. The Service obtains a special smoke permit each year before burning, and burns can only be conducted on specific days. Public notification of an intended burn is provided through several media outlets before the season begins, as well as on each burn day.

This past year, the Service was honored with the 2006 Fuels Management Excellence Award for the Mountain Prairie Region. A national panel of judges reviewed the nominations and selected one winner for each region.

Judges noted that the Arsenal team successfully overcame the unique challenges the site posed for prescribed burning because of its proximity to Denver International Airport and densely populated residential areas.

Weather permitting, the Service plans to burn approximately 900 acres in the spring and fall of 2007. Typically, burning does not occur during the summer months because grass-land birds are using areas for nesting, and not enough rain falls during the hot summer months to help grasses grow after a fire.

If you have any questions about the prescribed burn program, please call 303-289-0659. ■



Photo: Lorenz Sollman USFWS

Service firefighters, joined by volunteer firefighters from the metro area, use the prescribed burns for training.



Photo: Rich Keen/DPR Inc.

Photo: DPR/Rich Keen

A prescribed burn takes place on the Arsenal.

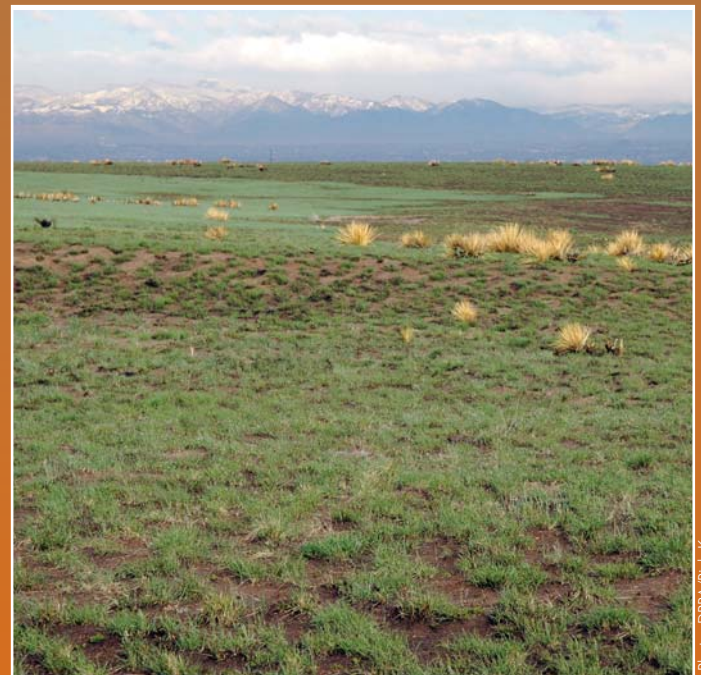
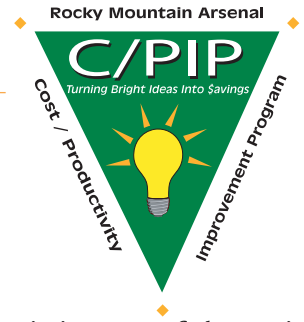


Photo: DPR/Rich Keen

As a result of the prescribed burns, the native plants and grasses thrive.

Bright Ideas Save Millions



Eight years of innovative thinking by Arsenal employees has resulted in more than \$57 million in savings. Through the Cost/Productivity Improvement Program (C/PIP), more than 870 employees have developed initiatives to improve the overall productivity, safety and quality of the cleanup program.

Innovative ideas such as working with our new neighbor to the west, the Prairie Gateway redevelopment project in Commerce City, to use its discarded topsoil from its many infrastructure projects resulted in a cost savings of \$146,000. The Arsenal used this nutrient-rich soil to backfill completed cleanup areas in advance of reseeding the area with native plants and grasses. Additionally, Arsenal trucks used a special entrance located between the Prairie Gateway and the Arsenal to haul the material without routing truck traffic onto public roads.

Not all ideas result in tangible cost savings; instead some focus on improving the overall safety of the cleanup program. For example, to reduce the high volume of truck traffic for two cleanup projects that were in very close proximity, one of the project teams completed its work in the evening versus the daytime. This idea reflects our “safety first, first in safety” culture, which is the most important aspect of each cleanup project.

These are just two examples of the more than 30 ideas submitted this past year to the C/PIP program. Thanks to our employees’ creative approach and ‘thinking outside of the box’ their ideas resulted in an overall cost savings of \$22 million in 2006. ■

Former Basin F Soils Project to Begin This Summer

The design for the final clean-up project at the Rocky Mountain Arsenal involving the excavation of contaminated soils is now complete.

The Arsenal released the 95-percent design for the Former Basin F Soils project for public comment this past November and finalized the 100 percent design in February. Weather permitting, the excavation work will begin in June and end in spring 2008.

The excavation area is located to the east of the Basin F Wastepile within the footprint of the former Basin F. The project will involve digging up approximately 210,000 cubic yards of soil and transporting it to the on-site landfill. Once that work is completed, crews will backfill the excavation areas with soil. During future projects, crews will finish backfilling the basin and construct a cover over the area. The cover will be composed of a layer of crushed concrete and four feet of clean soil topped with native vegetation.

The Former Basin F Soils project will be the second and final project at the basin involving the excavation and removal of contaminated soils. The U.S. Army built Basin F in 1956 primarily to store liquid wastes from the Army and Shell Oil Co.’s manufacturing operations. The basin was constructed with an asphalt liner to prevent waste from leaking into the ground, but the liner was ineffective and soil and groundwater contamination occurred.

In 1988, the Arsenal drained the basin and consolidated the sludge and soils into the wastepile. The basin was then covered with soil while the final clean-up plans were developed and approved by federal, state and local regulatory agencies. (The liquids were later incinerated at the Arsenal between 1993 and 1995.) The final clean up of the wastepile began in April 2006 and is now more than 60 percent complete.

Some contaminated soil remains in the basin outside the wastepile, and that material will be excavated during the Former Basin F Soils project. Because the soils contain odorous materials, the project will use the same proven odor-control measures employed for the Basin F Wastepile. Those include monitoring odors 24 hours a day and using odor-suppressing foam, plastic liners and soil covers over exposed excavation areas. A meteorologist will also gather weather data from an on-site meteorological tower to ensure work is conducted only when weather conditions allow for adequate odor dispersion.

The Environmental Protection Agency, Colorado Department of Public Health and Environment and Tri-County Health Department will work with the Arsenal to monitor operations. Tri-County Health Department will also offer its 24-hour odor-response line at 303-286-8032.

To learn more about the Former Basin F Soils project, please call the Rocky Mountain Arsenal Public Affairs Office at 303-289-0136, or visit the Arsenal online at www.rma.army.mil. ■

2006 IN REVIEW

Adding land to the National Wildlife Refuge System, closing a landfill and launching a long-awaited clean-up project are just a few of the milestones achieved at the Arsenal in 2006. As the site moves forward, entering its final phase of cleanup, we look back at the 2006 site highlights.

Refuge Expansion - The Refuge doubled in size to more than 12,000 acres after the EPA certified that more than 7,000 acres were clean and ready to be removed from the Superfund list. Once off the list, the U.S. Army transferred the land to the U.S. Fish and Wildlife Service to expand the Refuge.

Basin F Wastepile - After months of community outreach about this project, the Basin F Wastepile excavation began in April 2006 with no odor impacts on the community to date.

Enhanced Landfill - The Arsenal's second landfill was certified and opened for Arsenal-only waste in March 2006.



Photo: DPRA/Rich Keen

Hazardous Waste Landfill - The Arsenal's first landfill reached capacity and accepted its last load of waste in the summer of 2006.

Prescribed Burns - The Rocky Mountain Arsenal National Wildlife Refuge received the "Fuels Management Excellence Award" in recognition of the successful planning and implementation of prescribed burns for more than 800 acres in 2006.

Shell Trenches Cover - Cover construction over the area began in June 2006 and is the first Arsenal project to use recycled concrete from the old Stapleton Airport.



Photo: DPRA/Rich Keen

Reseeding - Approximately 300 acres were reseeded with native plants and grasses as part of the overall plan to return the site to native shortgrass prairie habitat. ■



Photo: Fred Krampetz/USFWS